

## **HJR 622 STUDY: CHESAPEAKE BAY PRESERVATION ACT - EXPANSION**

RESOLVED FURTHER, That the Chesapeake Bay Local Assistance Department be requested to submit to the Commission for inclusion in Commission's interim report (i) **an assessment of the benefits to the environment, along with the costs and effects to state and local governments of extending the Act to include localities outside of "Tidewater Virginia" that are within the Chesapeake Bay watershed;** (ii) **the potential need for changes to existing regulations to reflect differences in the topography and geology for such an expansion;** and (iii) **the financial resources needed in the form of state implementation grants to local governments for such an expansion.** The Department shall complete and submit its findings and recommendations to the Commission by October 20, 2001.

### **III. STUDY FRAMEWORK**

The challenge presented in this study is very complex. This is due to the very nature of attempting to identify and assess impacts that will occur in the future and which cannot be isolated i.e. they are a part of a complex system of development and regulations. Development occurs based, primarily, upon private sector decision making; and, with respect to development in a geographic area or over a period of time may, or may not, impact the environmentally sensitive features that are protected by the Act. The Act and its Regulations are just one part of a larger regulatory framework that is administered and implemented at the federal, state, and local level. Further, as becomes evident in this study, there needs to be significant change in the Act's Regulations to appropriately address the proposed Expansion Area. Thus, it is impossible to aggregate the effects of application of the Act upon 104 additional units of government and the geographic areas they encompass. This is not to say that an assessment of the environmental effects and potential effects upon local and state government cannot be made. To do this, however, requires looking at the overall effect of the water-quality based environmental condition of Virginia's portion of the Chesapeake Bay Watershed through comparison of the Tidewater Area, that has been subject to the Act for a decade, with the proposed Expansion Area. Similarly, comparisons can be made between the CBLAD regulatory program for the Tidewater Area and the use of extrapolations to predict the effects for the Expansion Area. The purpose of this Chapter is to describe the methodology that is used for the analysis that is conducted in the following three chapters.

To provide support for the above premise, reference is made to the Virginia Department of Planning and Budget Economic Impact Analysis, dated June 21, 2000, that was prepared for a major revision to the Chesapeake Bay Preservation Area Designation and Management Regulations (§ 9 VAC 10-20-10, et. seq.). In essence, the scope of that analysis covered the applicability of the Regulations, and by direct application, to the Act. Due to the nature of the topic, the assessment of the overall economic impact of the proposed regulation changes is directly applicable to an assessment of the expansion of the Bay Act. Please refer to Economic Impact Analysis, Virginia Department of Planning and Budget, for changes to 9 VAC 10-20, dated June 21, 2000 pages 37 to 40 for the overall economic impact assessment of the proposed regulations. Pertinent aspects of that assessment follow.

- In order to evaluate the overall economic impact of major changes to the regulations (or to expansion of the Act), we would have to know what water quality and other amenities would be with and without the changes and how people would value the difference. We would also need to know what costs would be incurred because of the action. The discussion in the June 21, 2000 EIA makes it quite clear that a numerical measure of the costs and benefits would be quite speculative.
- Each step in the analysis was subject to uncertainty. The behavioral, physical and biological systems that are affected by the terms of the expansion, and revised regulations, are highly complex and many of the interactions between the various components of the system are only partially understood. In addition to uncertainty about the behavioral aspects, there is great uncertainty about the effectiveness of the various effluent control strategies, about the physical distribution of effluents, about the biological consequences of a given temporal and geographic distribution of effluents, and about how much people value the change in biological and physical attributes of the tributary streams that feed the Bay and the Bay itself. Many of these interactions have been measured with some degree of success, and each year, more is learned. However, while the direction of many responses is fairly certain, the magnitudes are still subject to very great uncertainty.
- The DP&B analysis concludes with the following. “We are led to the conclusion that too little is known to estimate how much of a reduction in non-point source emissions will result from the implementation of this regulation. Nor do we have the data necessary to estimate the costs of compliance. Estimating benefits and costs is extremely difficult in this instance because the changes in land-use patterns are so large that significant transfers of wealth are taking place, and it is very difficult to disentangle the wealth transfers from changes in net economic value. Given this uncertainty, CBLAD should make every effort to minimize compliance costs and to encourage private interests to find ways of lowering the costs of protecting the Bay.”

The conclusions drawn from the analysis of the proposed changes to the Regulations are applicable to the proposed expansion since expansion of the Act is even more general than are regulations. However, as shown in Chapter IV, it appears that the environmental benefits (water quality) as practiced through adherence to the Bay Act are significant. Finally, as is shown in Chapter VI, CBLAD does recommend several changes in the way that the current program is administered and applied. This will result in minimizing compliance costs.

**Geographic Area and Units of Government:** For the purpose of this analysis there are 104 units of local government deemed to be in the expansion area. The jurisdictional breakdown is 36 counties, 11 cities, and 57 towns with an approximate population of 1,389,400 and a land area of approximately 18,700 square miles. Table III-1 provides a comparison of this data between the Tidewater Area and the Expansion Area.

TABLE III-1	<i>Tidewater Area</i>			<i>Expansion Area</i>		
	Number	Population	Land Area sq. mi.	Number	Population	Land Area sq. mi.
Cities	17	1,720,576	1,478	11	282,688	150
Counties	29	2,649,129	8,370	36*	1,106,721	18,551
Towns	38			57		
Local Governments	84	4,369,705	9,848	104*	1,389,409	18,701

\* Technically, there are 41 counties or portions thereof in the Expansion Area; however, 5 of those counties have only a minimal land area, have only a minimal population, and do not have any impaired water bodies. Thus for the purpose of the analytic study, they are not included in the Expansion Area.

In reviewing this data, there are sharp distinctions between the Tidewater Area and the proposed Expansion Area. Roughly, the land area under the Act would triple while the affected population would increase by one-third.

Table III –2 provides a listing of the counties, cities, and towns along with their respective planning district or regional commission. There are 41 counties within the Chesapeake Bay Watershed that are not under the Bay Act. Those shown with an \* are partially within the watershed. Five (5) of these (shown with \*\*) have only a small portion of land in the watershed and there are no impaired streams or significant population concentrations therein. Thus, it is suggested that they not be subject to the expansion. This leaves 36 new counties.

There are nine (9) cities in the expansion area and there are two (2) cities in the Tidewater portion of the watershed that were not included under the original program. These two cities should now be subject to the Act, bring the total to eleven (11). There are fifty-seven (57) towns in the expansion area. A few of these towns are close to the watershed boundary and may not be within it. That number is few and will be corrected as the project continues.

There will be ten (10) Planning District or Regional Commissions that will have local government members subject to the Bay Act. Three (3) of these (CPDC, RRPDC, NVPDC) already have members subject to the Bay Act. The New River PDC is identified in the table, but it is suggested that the correlated counties be deleted from the listing, thus the NRPDC would not be included.

TABLE III-2			
<b>LOCAL GOVERNMENT JURISDICTIONS IN THE POTENTIAL EXPANSION AREA</b>			
<b>Counties</b>	<b>Cities</b>	<b>Towns</b>	<b>RC/PDC</b>
$41 - (5) = 36$	$9 + 2(*) = 11$	57	$7 \text{ new} + 3 \text{ exist} = 10$
Albemarle	Charlottesville	Scottsville	TJPDC - 10
Alleghany	Covington	Clifton Forge Iron Gate	RVARC - 5
Amelia			PPDC - 14
Amherst		Amherst	Region 2000 - 11
Appomattox*		Appomattox Pamplin	Region 2000 - 11
Augusta	Staunton Waynesboro	Craigsville	CSPDC - 6
Bath			CSPDC - 6
Bedford*	Lynchburg		Region 2000 - 11
Botetourt		Buchanan Fincastle Troutville	RVARC - 5
Buckingham		Dillwyn	PPDC - 14
Campbell*			Region 2000 - 11
Charlotte**			PPDC - 14
Clarke		Berryville Boyce	NSVRC - 7
Craig*		New Castle	RVARC - 5
Culpeper		Culpeper	RRRC - 9
Cumberland			PPDC - 14
Dinwiddie*			CPDC - 19
Fauquier		The Plains Remington	RRRC - 9
Fluvanna		Columbia	TJPDC - 10
Frederick	Winchester	Middletown Stephens City Warrenton	NSVRC - 7
Giles**			New River - 4
Goochland			RRPDC - 15
Greene		Stanardsville	TJPDC - 10
Highland		Monterey	CSPDC - 6
Loudoun		Hamilton Hillsboro Leesburg Lovettsville Middleburg Purcellville Round Hill	NVPDC - 8
Louisa		Louisa Mineral	TJPDC - 10
Lunenburg**			PPDC - 14
Madison		Madison	RRRC - 9
Montgomery**			New River - 4
Nelson			PPDC - 14
Nottoway*		Burkeville Crewe	PPDC - 14

Orange		Gordonsville Orange	RRRC - 9
Page		Luray Stanley	NSVRC - 7
Powhatan			RRPDC - 15
Prince Edward*		Farmville	PPDC - 14
Rappahannock		Washington	RRRC - 9
Roanoke **			RVARC - 5
Rockbridge	Buena Vista Lexington	Glasgow Goshen	CSPDC - 6
Rockingham	Harrisonburg	Bridgewater Broadway Dayton Elkton Grottoes Mount Crawford Timberville	CSPDC - 6
Shenandoah		Edinburg Mount Jackson New Market Toms Brook Woodstock	NSVRC - 7
Warren		Front Royal Shenandoah	NSVRC - 7
[Prince William County which surrounds these cities is already subject to the Bay Act.]	Manassas Manassas Park		NVPDC - 8
<i>Counties</i>	<i>Cities</i>	<i>Towns</i>	RC/PDC

**Methodologies:** As noted in the beginning of this Chapter, an assessment of the environmental effects and potential effects upon local and state government requires looking at the overall effect of the water-quality based environmental condition of the Virginia's portion of the Bay Watershed through comparison of the Tidewater Area with the proposed Expansion Area. Similarly, comparisons can be made between the CBLAD regulatory program for the Tidewater Area and the use of extrapolations to predict the effects for the Expansion Area. However, operating only with broad-based information will not produce a result that is responsive to the directives in HJ 622.

To be responsive to the directives in HJ 622, the final methodology involves identifying the increment of change that will occur between the present situation (the baseline condition) and the resulting situation once there is an expansion of the Act's geographic coverage. The increment of change is then addressed for its effects in terms of environmental benefit and in terms of costs and allocation of resources. In table form the columns are identified as:

Bay Act Expansion Study – Incremental Change Analysis			
CURRENT SITUATION {The Baseline Condition}	ACTIONS THAT MAY OCCUR {The Increment of change}	BENEFITS	COSTS AND RESOURCES

The items for which an increment of change was identified are listed in Table III-3. The environmental benefits analysis is contained in Chapter IV; the effects on local government in Chapter V; and costs to the state in Chapter VII. Table III-4 provides an abbreviated, key-word summary of the content of those chapters.

The methodology used for evaluating the environmental benefits in Chapter IV occurs at two levels. The first is the broad-based approach and generally consists of examining the environmental framework for water quality. To assist in this effort, CBLAD convened a focus group to help identify issues and perspectives. The second part examines the anticipated actions and associated increments of change as they pertain to each of the eleven performance criteria that would be applied if the Act and its Regulations, in their current form, were extended to the balance of the watershed. Included in this analysis was the relationship between expansion of the Act and its Regulations and Virginia's obligation to meeting many of the commitments in the Chesapeake Bay 2000 Agreement.

<b>TABLE III-3 ACTIONS ANTICIPATED TO RESULT IN AN INCREMENT OF CHANGE</b>				
<b><i>Program Development</i></b>	<b><i>Land Use &amp; Development Activity</i></b>	<b><i>Monitoring and Enforcement</i></b>	<b><i>Board and Department Activities</i></b>	<b><i>Technical Assistance Program</i></b>
Water quality amendments to comp plans	Land use limitations within the RPA	Consideration of water quality items in the plan review process	Increase in the number of Board members	Expansion of environmental data base
Environmental inventories	E&SC at lower threshold	Septic system pump out compliance program	Increase in the number of review committees	Increase to the local assistance grant program
Designation of RPAs	Compliance with the general performance criteria	BMP agreement data base	Increased staffing	In-house expertise in karst topology and associated issues
Designation of RMAs	Preparation of farm plans	Local guidance re buffer management	Additional space and outfitting	Training of locality staff
Prepare and adopt performance criteria	Local authority re silviculture ops	Local enforcement program re violations e.g. buffer	Response to inquiries (daily inquiries)	Revisions/adds to Local Assistance Manual re new features/methods
Land development code amendments	Local stormwater management plans	Local enforcement program	Increased review of site plans & WQIAs	Preparation of guidance unique to the expansion area
Plan of development review process	BMP maintenance program	Processes for waivers, exemptions, modifications, & exceptions		
Watershed based planning	Wetland permitting			
WQIA requirement	WQIA preparation and compliance			

The methodology used for evaluating the local government effects in Chapter V involved identifying the capabilities of local government units in the Expansion Area through the use of a survey, the identification of what local units of government will need to do to comply with the program components (development and implementation), and how similar obligations were accommodated by the Tidewater localities. In addition, outreach meetings were held in each of the planning districts that would be new to the program. Those meetings produced issues, concerns, and ideas that would shape this report's suggestions for changes to the current regulations and implementation program.

The information contained in Chapters IV and V provided the basis for identifying the types of changes in both the current regulations and the current implementation program that should be considered if an expansion is to occur. In addition to that information, CBLAD considered the input received with regard to the currently proposed changes to the existing regulations. The types of changes are addressed in Chapter VI.

The methodology used for evaluating costs to the state, provided in Chapter VII, draws from the ten-year record of program development and implementation and the perceived needs of the affected units of government. Three scenarios are used. The first is the broad-based extrapolation that was presented to the Senate Committee on Agriculture, Conservation and Natural Resources when it considered SB 821. The second scenario addresses the application of the current program but taking into account the significant differences between the units of local government as exists in the Tidewater and Expansion Areas. The third scenario examines a modified program along with the local government differences.

**Table III-4 Bay Act Expansion Study – Incremental Change Analysis**

<b>CURRENT SITUATION</b> “The Baseline Condition”	<b>ACTIONS THAT MAY OCCUR</b> “The Increment of Change”	<b>BENEFITS</b> “To the Environment”	<b>COST AND RESOURCES</b> “To local & state government”
<b>PROGRAM DEVELOPMENT</b>			
Comprehensive plans are required. Water quality considerations are optional.	Local comprehensive plans will need to address water quality per guidance issued by the Board. At a minimum, a review is required. It is likely that local plan amendments will be necessary.	Raises awareness of water quality and development issues. Provides a vehicle for creating and implementing such programs. Results show enhanced water quality.	As necessary, assistance is provided to local governments through grants.  See Chapter VII for state costs.
An environmental inventory as an optional aspect in local planning. It is accommodated in varying degrees of specificity	An environmental inventory becomes an essential aspect of the local comprehensive plan. Guidance is issued by the Board.	By its very nature, such environmental considerations are assessed and protected in a manner consistent with local goals and objectives. Results show enhanced environmental quality.	As necessary, assistance is provided to local governments through grants. Also, direct information is provided by the CBLAD GIS function.  See Chapter VII for state costs.
No such designation required; a few localities use similar designations for streambed protection.	Designation of Resource Protection Areas (RPA)	Areas at, or near, designated state waters will be identified as sensitive lands requiring protection.	As necessary, assistance is provided to local governments through grants. Also, direct information is provided by the CBLAD GIS function.  See Chapter VII for state costs.
No such comprehensive designation exists; however, there are overlays for flood plain protection and scenic corridors.	Designation of Resource Management Areas (RMA)	Areas that have an intrinsic relationship to the quality of State waters will be identified and managed in a comprehensive manner. Results from this type of planning approach show enhanced environmental quality in localities.	As necessary, assistance is provided to local governments through grants. Also, direct information is provided by the CBLAD GIS function.  See Chapter VII for state costs.



<p>All the expansion counties and cities have zoning ordinances. There may be a town that does not. Addressing water quality in the local zoning code is permissive. - - All localities have subdivision codes but they do not have to address water quality considerations. - - Performance criteria are an integral part of land development regulations. The degree to which they address water quality and protection vary.</p>	<p>Preparation and adoption of performance criteria consistent with those established in the regulations will need to be drafted, reviewed, adopted, and codified through either incorporation, or reference to, local land development codes (zoning, subdivision, stand-alone ordinance, etc)</p> <p>These include stormwater management programs, septic system maintenance programs, and site development standards.</p>	<p>Each locality will have a regulatory program to protect the quality of state waters . Local zoning codes will address water quality considerations. Local subdivision codes will address water quality considerations. The result of having such regulations show enhanced environmental quality.</p>	<p>As necessary, assistance is provided to local governments through direct technical assistance and through grants.</p> <p>See Chapter VII for state costs.</p>
<p>Basic provisions exist in statutes and nearly all localities have a formal review process.</p>	<p>Land disturbance exceeding 2,500 sq. ft. and proposed development in a RPA is subject to a Plan of Development Review Process</p>	<p>This process ensures that water quality matters are addressed during the planning stages. It also requires that specific performance standards are reviewed and subject to public review</p>	<p>Minimal implications for local government since such a procedure already exists.</p> <p>State costs are limited to technical assistance provided by the liaison program.</p>
<p>Watershed based planning is seldom used. However, increased public awareness and EPA grant – funding programs, along with emphasis in C2K, and the need for TMDL compliance is fostering more such planning.</p>	<p>Watershed based planning is encouraged as an appropriate way to address requirements of the Act.</p>	<p>Watershed based planning is a viable way to address water quality. It, or a similar approach, is essential for de-listing of impaired waters.</p>	<p>This is an alternative method for approaching the planning requirements of the Act. Watershed based planning is a funding priority for CBLAD local assistance grants.</p>
<p>The use of performance based water quality requirements is permissive under the zoning statutes. It is not widely used in the expansion area.</p>	<p>A Water Quality Impact Assessment is required for any proposed development in a RPA. It is permissive throughout the RMA. Localities must prepare minimum criteria</p>	<p>The WQIA establishes a program for evaluation of a development proposal with regard to water quality and hydrologic implications. It identifies appropriate mitigation that must be complied with.</p>	<p>Preparation of the WQIA standards and criteria is a local assistance grant eligible activity.</p> <p>Also, direct technical assistance is available through the liaison program.</p>

### ***LAND USE & DEVELOPMENT***

Land use in (would be) the RPA is controlled by the base zone district.	Within the RPA only water dependent uses are allowed. Maintenance of the buffer and limited passive use is allowed.	The limitation of land use allows for the protection of the associated water feature from pollution that would be generated from such uses and allows the buffer to perform its natural function.	There is no direct cost to local government. The fiscal implications are problematic. Impacts to property owners varying depending upon the situation. See Chapter IV for discussion. The fiscal implications for the state are positive in that the amount of funding required to restore riparian areas and otherwise protect waters are diminished.
E&SC is required for development involving 10,000 sq. ft. or more of land disruption	E&SC program implementation at lower threshold. 2,500 square feet of land disruption in-lieu of 10,000 square feet as required under E&SC law.	More land development is subject to E&SC controls thus reducing the amount of sediment that enters waterways.	E&SC programs are already required in each locality. Thus, the cost is incremental and is related to the amount and type of development activity. There is no additional state costs related to this item.
Regulating landscaping, impervious cover, and grading exist in varying degrees in most localities.  In some localities, such as Loudoun and Clarke counties, expansion of the Act would not result in new regulations. In other localities, particularly those with only the minimal code, new regulations will be necessary.	Institution of a local requirement that requires compliance with the general performance criteria (in the regulations) re land disturbance, minimizing impervious cover, & preserving vegetation.  In general, the criteria would be established through: * landscaping standards (minimum) * establishing impervious (lot) cover standards * review of grading plans	Through the comprehensive and integrated approach envisioned by compliance with the Act, the natural hydrology of a site can be more closely adhered to resulting in preserving natural environmental functions and reducing the costs of development. Programs to comply with these requirements could run from simple standards to involving low impact development and similar design based development that preserves natural features and	The cost to local government will vary widely depending upon the type of regulations that are enacted.  For most localities, compliance with the general standards will simply be an extension of existing reviews. In other situations, more complex requirements may be applied. For the latter, local assistance funding is available.  Also, grant funding has been used for the on-going operation of plan review and site

		the natural hydrologic functions of a site. This results in lower cost maintenance and reduction of the need for structural BMPs.	inspection functions.  See Chapter VII for the costs to the state.
Except for poultry operations, the preparation of a nutrient management plan is a permissive activity. Such plans are provided by the NRCS and DCR but they only deal with nutrient management. Implementation of such plans is mainly accomplished through the cost-share program.	Preparation of farm plans on specific agricultural sites along with the implementation of the plans is required when an encroachment into the RPA buffer is desired.	The farm plan required under the Act is a comprehensive program that has three components. See Chapter IV for a full explanation.	The farm plan grant program within CBLAD has funded all such plans to-date, thus there is not a direct cost to local governments.  See Chapter VII for the costs to the state.
Enforcement of the Silviculture Water Quality Act has historically been after-the-fact and silviculture interests do not comply with the DOF best forestry practices.	<p>The Act provides for local authority regarding silviculture operations as they pertain to protection of the RPA buffer.</p> <p>This authority is exercised pursuant to a MOU, between DOF and CBLAD, that explains how the enforcement program works.</p>	Data from 1999 showed that less than 10% of silviculture operations adhered to Forestry Best Management Practices. In the Tidewater area, upon signing of the MOU, the number of violations has decreased. Less violations relates to enhanced water quality.	<p>There are no significant costs to local government as its involvement with this performance criteria is on a case-by-case basis.</p> <p>There are no significant costs to the state since there are already mechanisms in place for silviculture compliance with its water quality act.</p>

Stormwater management programs are permissive except for those localities subject to Phase I or Phase II VPDES. Also, such programs only need to deal with quantity. The State Stormwater Manual is enabled as a permissive program.	A local stormwater quality management program is required. The minimum effort is the establishment of pollution run-off standards and use of WQ-BMPs. Establishment of local watershed defaults is optional	Enhanced water quality is achieved by meeting the standard that there is no net increase in the pollution that leaves a site. This places a cap upon the ability to further degrade the quality of state waters.	Impact to local governments differ depending upon their existing programs and capacities. Running an on-going stormwater program can vary widely in costs. Some assistance is available through the local assistance grant program for those activities associated with the review of development projects.
There are no requirements in the expansion area for such a program. They exist on a case-by-case basis.	A BMP maintenance program that provides for inventory and tracking of maintenance is required.	These programs provide a mechanism for assuring that BMPs continue to work properly and the pollutant reduction targets are met.	The cost to local government is addressed under local program monitoring (next session)
New permitting requirements for non-tidal wetlands became effective in 2001.	Evidence of Wetland permitting is required.	Through review of the wetland permitting program and the local RPA program, the necessary coordination is provided to insure that inappropriate degradation of state waters does not occur.	This is not a substantial cost to local government in that it provides coordination among different permits and authorities. This item can be viewed as a preventive maintenance benefit.
<b><i>LOCAL PROGRAM MONITORING AND ENFORCEMENT</i></b>			
This is not a required review item. However, individual jurisdictions may already provide for it.	Consideration of water quality items, through compliance with the performance standards, in the plan of development review process is required.	By having a program for evaluation of a development proposal with regard to water quality and hydrologic implications, appropriate mitigation is identified and applied; thus, enhancing water quality.	The costs to local government vary widely depending upon current local programs and the type of development that occurs. See Chapter V for information. CBLAD local assistance grants are used to off-set some of these costs on a case-by-case basis. See Chapter VII for costs to the state.

Such programs are instituted only on a sporadic basis, usually when there is a health threat or a specific problem is present.	A program to insure compliance with the septic system pump-out requirement is necessary.	A properly implemented programs results in a reduction of nitrogen loading and the amount of pathogens and toxics that reach state waters. Septic pump-out and repair programs present a primary strategy in the clean-up of streams.	Where they exist, most of the programs involve a cooperative agreement with the local health unit that maintains the data base once it is created by the local government. Except of the on-going program review costs, and dealing with specific situations, this element is not significant.
How well local programs are monitored and enforced varies widely per jurisdiction. This is particularly true when the local programs are “voluntary”. Even with mandatory programs, there is a low compliance rate as witnessed with the rate of adequate E&SC programs and the poor rate of compliance with the DOF program	Local monitoring and enforcement programs - - for violations, especially the buffer; for the process for the administration of waivers, exemptions, modifications, and for processing exceptions; for E&SC statute compliance, BMP agreement data base maintenance and the like are subject to review by CBLAD. Because the overall program is mandatory, it is expected that there is dutiful compliance.	Adequate enforcement of environmentally based statutes is necessary to achieve the environmental goals that the regulations are to achieve.	As with all components of the overall local program, the cost to local government is dependent upon existing capacities and the type of development that occurs. However, each such component has an impact upon the cumulative costs. See Chapter V for further commentary.
<b>BOARD AND DEPARTMENT ACTIVITIES</b>			
There are currently nine Board members; one for each PDC.	There will be an increase in number of Board members	Not applicable	This will be an incremental operating cost. See Chapter VII.
Currently, the review committees meet quarterly. In the early days of the initial program, monthly meetings were necessary.	There will be an increase in the number of Review Committees and associated meetings	No applicable	This will be an incremental operating cost. See Chapter VII.
CBLAD currently has 21 FTE.	There will be a need for an increase in staff.	Not applicable.	See Chapter VII for details under various scenarios.

Offices are located in the Monroe Building in Richmond. There are space limitations.	There will be a need for additional office space and outfitting	Not applicable	One time costs for office space and outfitting will be necessary. It is anticipated that remote office location(s) will be necessary. See Chapter VII.
There is a liaison program that accommodates such requests.	There will be a need to respond to a greater number of daily inquiries and increased review of site plans and WQIAs	Not applicable	This item will be a part of the general staff increase for the liaison program
<b>TECHNICAL ASSISTANCE PROGRAM</b>			
Most local governments do not access information that is available from various sources. A part of this is simply priorities and another is dependent upon their computer and digital capabilities.	Expansion of the CBLAD environmental data base for determining RPAs (e.g NWI & Topo maps)	Better mapping and inventory of environmental resources results in better planning to accommodate them.	CBLAD provides instruction and access to data downloads along with assistance in the interpretation of data.
Local assistance grants are not available to the expansion area.	Increase to the local assistance grant program scope and funding	It is only through the effective implementation of the paper programs that environmental benefits will occur.	See Chapter VII for the analysis pertaining to the local assistance grant program.
Does not currently exist within CBLAD. There is limited capability in other agencies.	In-house expertise in karst topology and associated issues	The expansion area presents a complex geologic construct. This is recognized by directed studies including HJ 161.	Staffing for this additional expertise in CBLAD is necessary. See Chapter VII.
See previous commentary.	Assistance with local SWM program development	Coordination with DCR efforts; assuring a seamless inclusion of water quality requirements.	Enhanced capacity will be necessary in CBLAD. See Chapter VII.
These items are all basic components of the current (Tidewater) liaison program. They do not presently exist for the expansion area except for individual guidance documents such as for septic systems, sinkhole, and similar items.	<ul style="list-style-type: none"> <li>* Training of locality staff in CBPA program development and implementation</li> <li>* Revision/additions to the Local Assistance Manual re new features and methods</li> <li>* Preparation of guidance unique to the expansion area</li> </ul>	Not directly applicable.	These items will be covered as a part of the general staff increase for the liaison program

